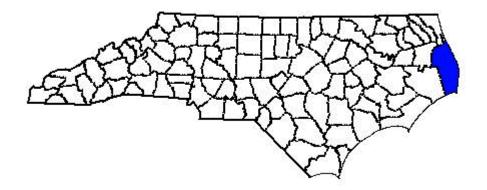
## **ANNUAL REPORT FOR 2004**



# **Hatteras Island Inlet Site Dare County**



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### **SUMMARY**

The following report summarizes the monitoring activities that have occurred in the Year 2004 at the Hatteras Island Inlet Site. The site is located in Dare County, North Carolina. The site was constructed in the Spring 2004 by the North Carolina Department of Transportation (NCDOT) to provide beach nourishment for the pipeline-related impacts for the roadway repairs along NC 12. This report provides the monitoring results for the first documented year of monitoring (Year 2004). According to the North Carolina Division of Coastal Management Permit #139-03, the Hatteras Island Inlet Site will be monitored for one year or until success criteria are met.

No hydrologic monitoring is required for this project; however, vegetation monitoring is required for one year. For 2004, the vegetation monitoring revealed a frequency of target species at 100.0% and the vegetative coverage scale value at 4.10. The vegetation data for 2004 met the 70% required frequency of target species and is on track to meet the scale value of 5 for the vegetative coverage. Based on the monitoring results from the 2004-growing season, NCDOT recommends discontinuing monitoring of the site.

### 1.0 INTRODUCTION: HATTERAS ISLAND INLET SITE

### 1.1 Project Description

The Hatteras Island Inlet Site is located in Dare County just North of Hatteras Inlet adjacent to the Pamlico Sound (Figure 1). The site was completed to provide beach nourishment for the pipeline-related impacts for the roadway repairs along NC 12.

### 1.2 Purpose

The purpose of this report is to detail the vegetation monitoring in 2004 at the Hatteras Island Inlet Site. No hydrologic monitoring is required for this particular site.

### 1.3 Project History

April 2004 Site Planted
September 2004 Vegetation Monitoring (1 yr.)



**FIGURE 1: SITE LOCATION MAP** 

## 2.0 VEGETATION: HATTERAS ISLAND INLET SITE (YEAR 1 MONITORING)

#### 2.1 Success Criteria

The vegetative marsh success of the wetland site will be determined in accordance with NMFS Guidelines. Monitoring plots found to be located within the open water channel will not be evaluated, and will not count toward the final count of plots. The vegetation component of the wetland site will be deemed successful if the following criteria are met:

- 1. At year five, the average of all plots should have a scale value of 5 (75% vegetative cover) consisting of wetland herbaceous species, not including any invasive species.
- 2. A minimum of 70% of the plots shall contain the target (planted) species.

### 2.2 Description of Species

The following species was planted in the Beach Restoration Area:

Spartina patens, Salt Meadow Hay

### 2.3 Results of Vegetation Monitoring

Plot#	Scale Factor	Spartina patens	Frequency	Comments
1	5.0	<b>/</b>	<b>/</b>	
2	4.0	<b>/</b>	<b>/</b>	
3	5.0	<b>/</b>	<b>/</b>	
4	4.0	1	<b>√</b>	
5	3.0	<b>/</b>	1	
6 7	5.0	<b>/</b>	<b>V</b>	
	5.0	<b>/</b>	1	
<u>8</u> 9	4.0	<b>/</b>	<b>\</b>	
	3.0	<b>/</b>	<b>√</b>	
10	4.0	<b>/</b>	<b>√</b>	
11	5.0	<b>V</b>	1	
12	5.0	<b>√</b>	<b>/</b>	
13	3.0		<b>√</b>	
14 15	3.0	<b>√</b>	√ √	
15	3.0		<b>V</b>	
Frequency (Percentage of Plot	s			
with Desired Species)	.=		100%	
Sum Scale Value			61.0	
Total Number of Plots			15	
Vegetative Cover (Scale Value	e)		4.1	

**Site Notes:** Other species noted: *Juncus* sp., foxtail, *Baccharis* sp., and goldenrod.

### 2.4 Conclusions

The scale value and frequency are on track for year 1.

NCDOT proposes to discontinue the vegetation monitoring at the Hatteras Island Inlet Site.

### APPENDIX A

SITE PHOTOS/PHOTO AND VEGETATION PLOT LOCATIONS

# Hatteras Island Inlet



Photo 1





Photo 3



Photo 4

### Hatteras Island - Inlet Site

